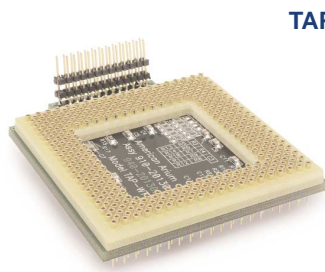
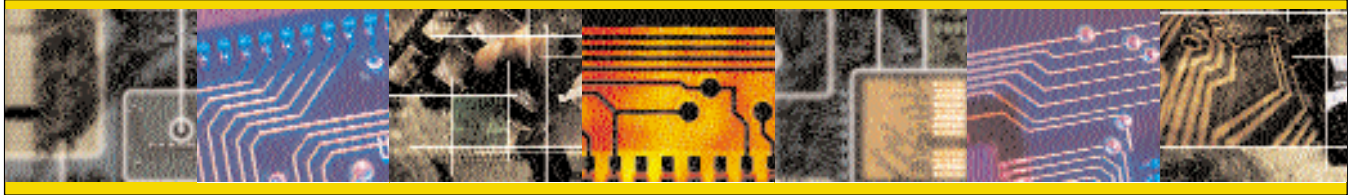
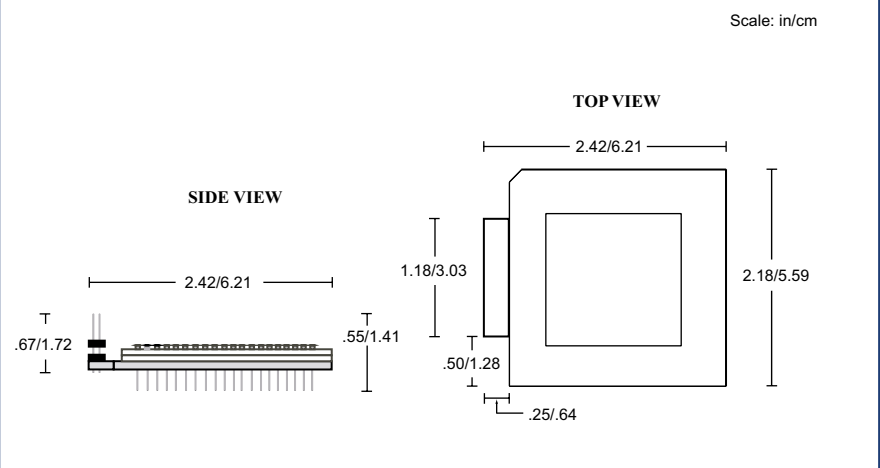


TAPs & TGIs

A JTAG test access port (TAP) adapter or target interface (TGI) is that part of our debug tool that fits on the end of the personality module or flexible cable that runs from the emulator to your target. TAPs may be purchased separately and can be used with ECM series emulators when you do not have a debug port on your motherboard. A TGI comes attached to a TRC product to provide JTAG and frontside bus access. It can be changed out for another TGI, although it is recommended that you return the TRC to us and let us make the switch.



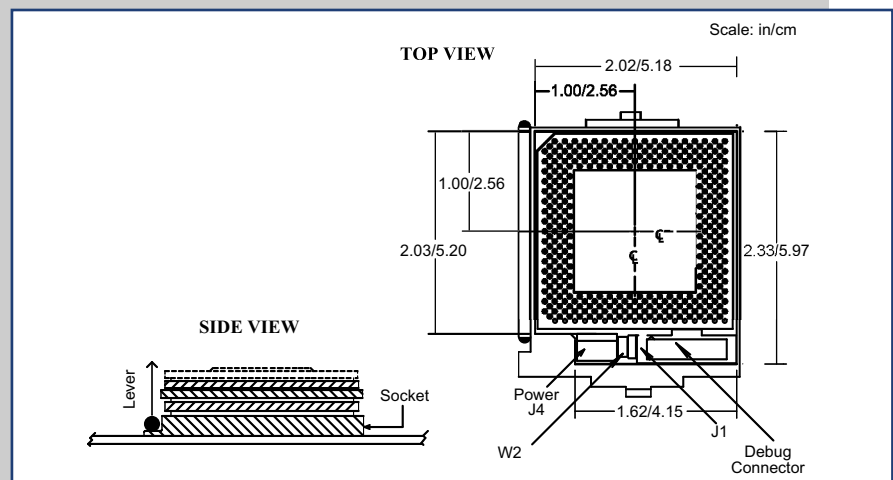
TAP-WT



Intel Pentium® 4 processors (423-pin package)

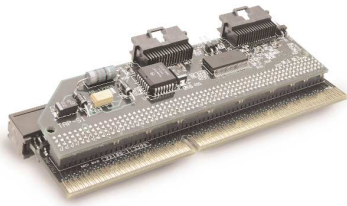


TAP-TU

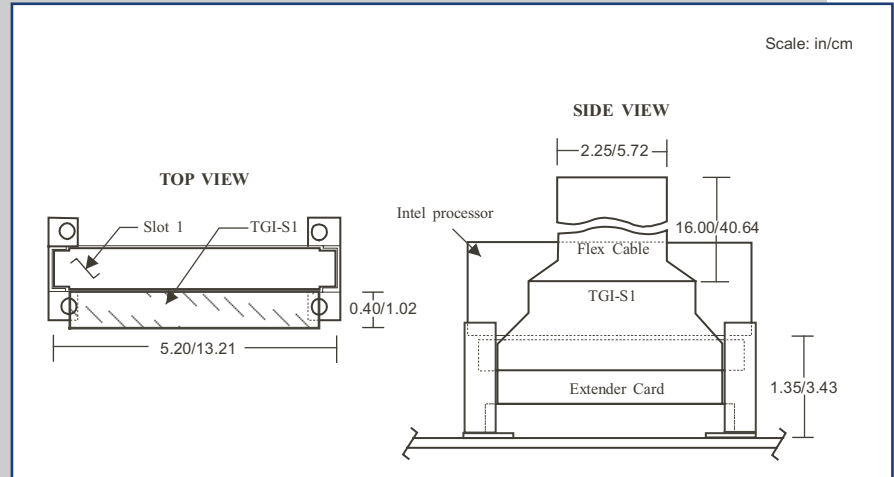
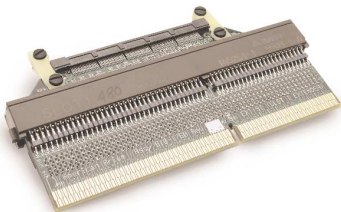


Intel Pentium III (including the 1.13A to 1.20+ GHz on 0.13 micron process), Celeron® processors (370-pin PGA)

TAP-S1

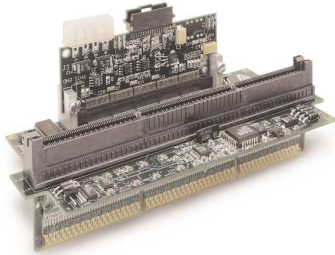


**TGI-S1H
TGI-S1A**

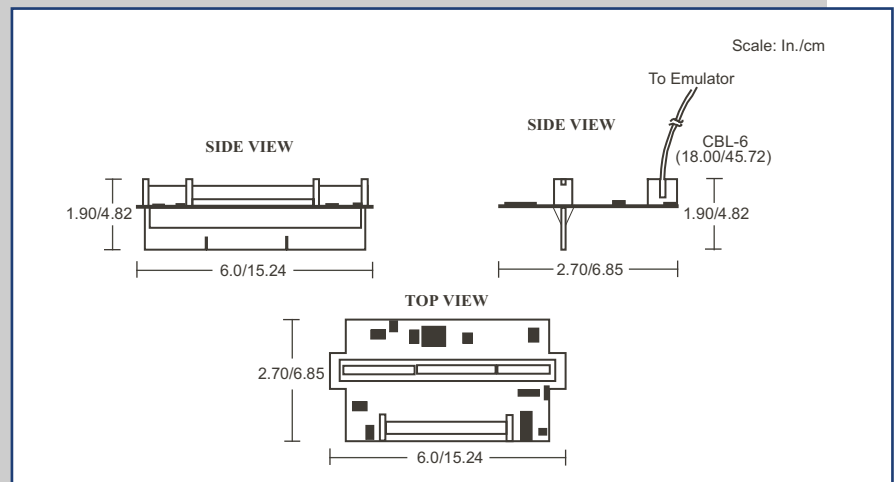
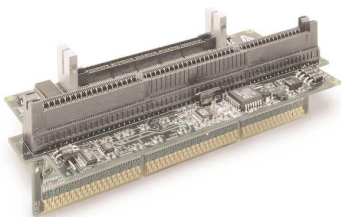


Intel Pentium II/III processors (Slot 1)

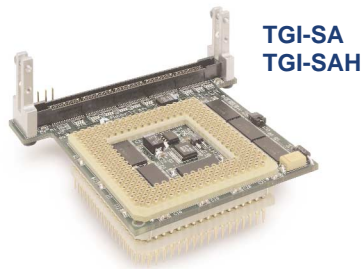
TAP-S2



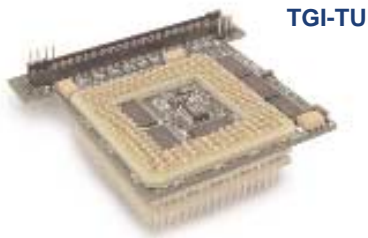
TGI-S2



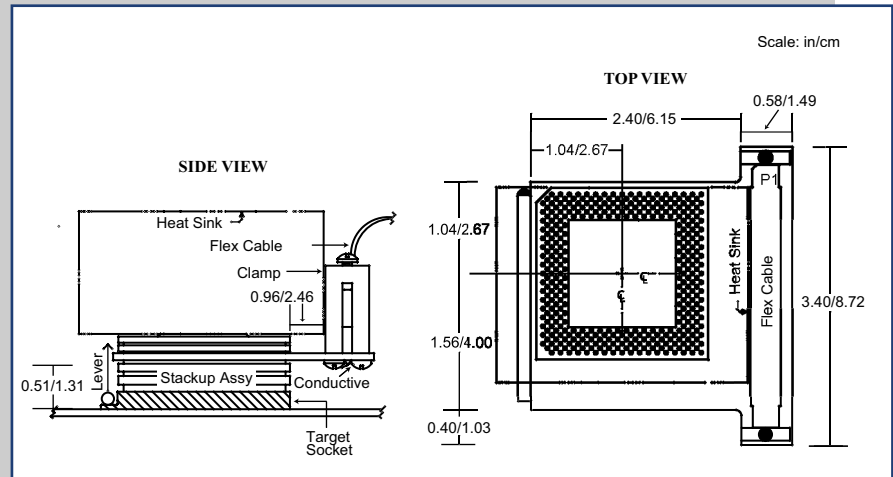
Intel Pentium II/III Xeon™ processors (Slot 2)



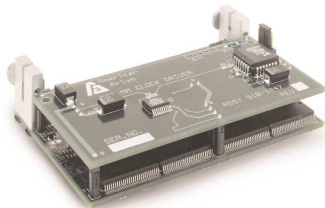
**TGI-SA
TGI-SAH**



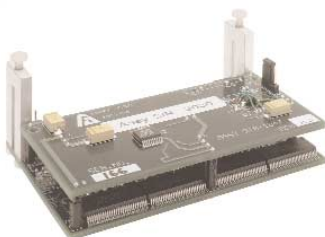
TGI-TU



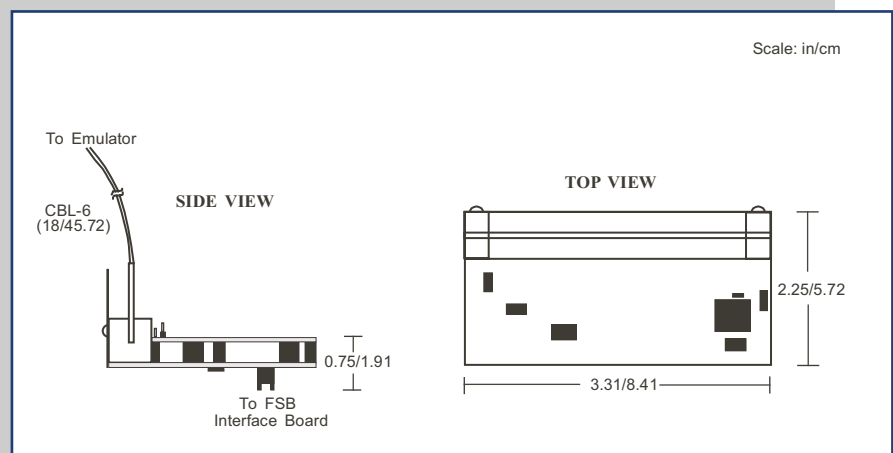
**TGI-SA/TGI-SAH: Intel Pentium III, Celeron processors (370-pin PGA)
TGI-TU: Intel Pentium III processors (1.13A-1.20+ GHz on 0.13 micron process)**



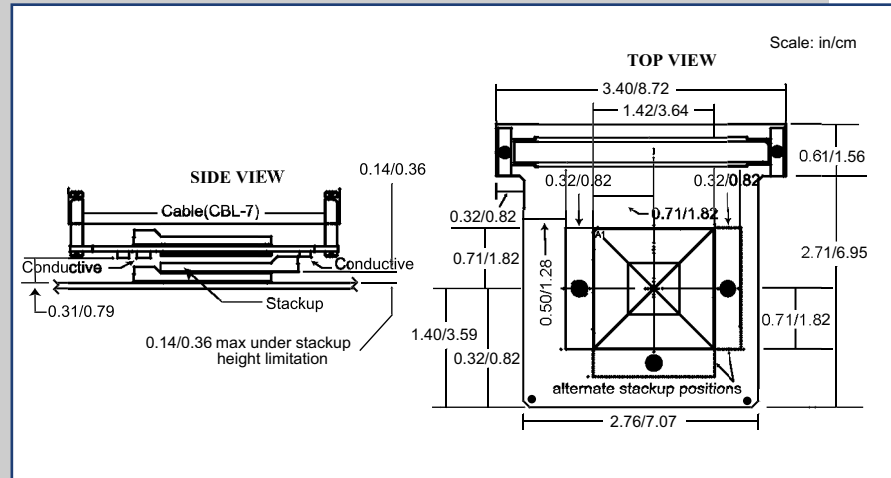
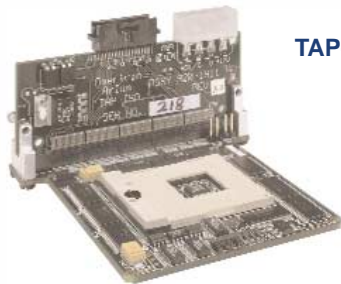
TGI-MM



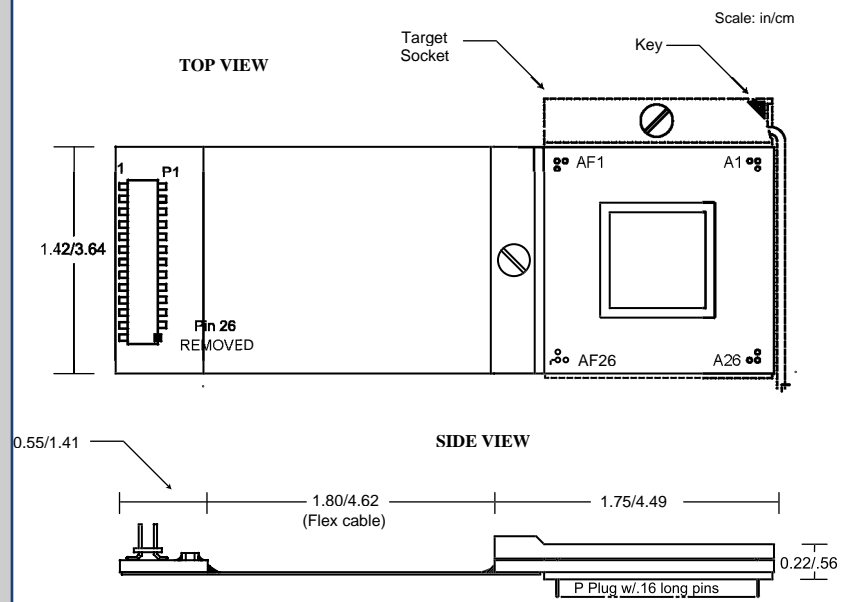
TGI-MMH



Intel Mobile Pentium II/III processors

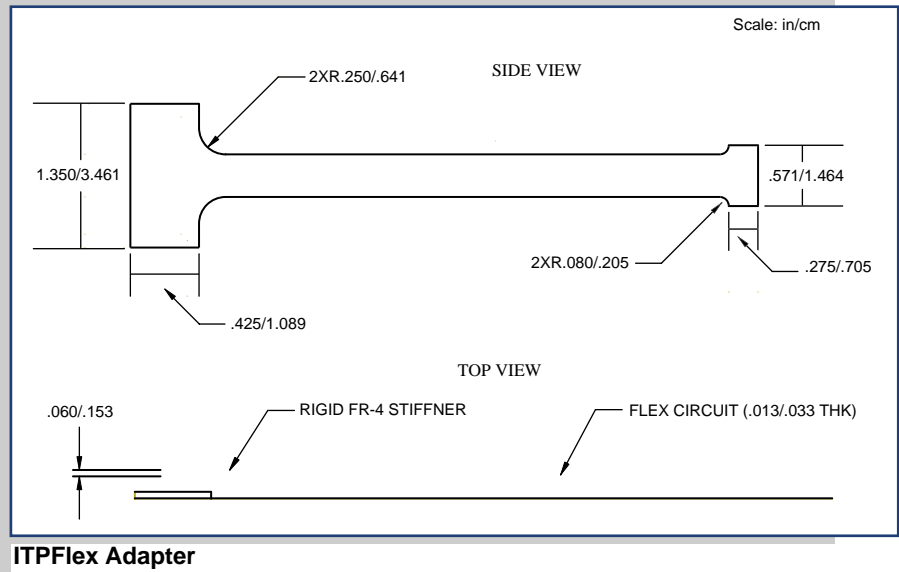


Intel Mobile Pentium III Processor-M processors (uFCPGA)

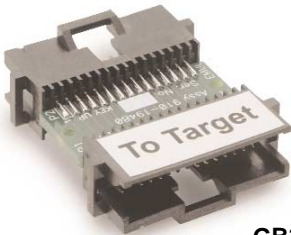


Intel Pentium 4 processors (478-pin package, uFCPGA), Celeron processors (478-pin package, 1.7 GHz+)

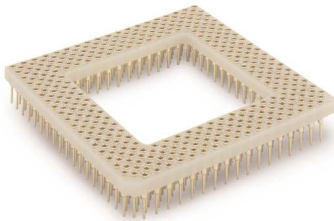
Adapters



Sockets



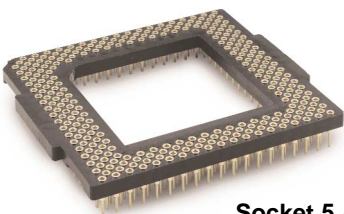
GB32AE



370-Pin PGA



**uFCBGA to uFCPGA
(480 contacts)**



Socket 5 & 7



**BGA to
micro PGA**

**Not shown:
uFCBGA to uFCPGA
(479 contacts)**

TAPs & TGIs

<p style="text-align: center;">TAPs/TGIs by Intel Processor</p> <p>Intel® Pentium® 4 processors (423-pin PGA)</p> <ul style="list-style-type: none"> TRC-20 + TAP-WT (run control only) ECM-20 + TAP-WT <p>Intel® Pentium® 4 processors (478-pin uFCPGA)</p> <ul style="list-style-type: none"> TRC-20 + TAP-PSC (run control only) ECM-20 + TAP-PSC <p>Intel Pentium II/III processors (Slot 1)</p> <ul style="list-style-type: none"> TRC-20 + TGI-S1H (66/100/133) TRC-6 + TGI-S1A (66/100) ECM-20 + TAP-S1 ECM-S2 + TAP-S1 	<p>Intel Pentium II/III Xeon™ processors (Slot 2)</p> <ul style="list-style-type: none"> TRC-6 + TGI-S2 ECM-20 + TAP-S2 ECM-S2 + TAP-S2 <p>Intel Pentium III processors (370-pin PGA)</p> <ul style="list-style-type: none"> TRC-20 + TAP-TU (run control only) TRC-20 + TGI-SAH TRC-6 + TAP-TU (run control only) TRC-6 + TGI-SA ECM-20 + TAP-TU ECM-S2 + TAP-TU <p>Intel Pentium III processors (1.13A to 1.20+ GHz on 0.13 micron process, 370-pin PGA)</p> <ul style="list-style-type: none"> TRC-20 + TGI-TU TRC-20 + TAP-TU (run control only) ECM-20 + TAP-TU ECM-S2 + TAP-TU 	<p>Intel Mobile Pentium III Processor-M processors (uFCPGA)</p> <ul style="list-style-type: none"> TRC-20 + TGI-MT ECM-20 + TAP-MT ECM-S2 + TAP-MT <p>Intel Mobile Pentium II/III processors</p> <ul style="list-style-type: none"> TRC-20+TGI-MMH (66/100) TRC-6 + TGI-MM (66/100) <p>Intel Celeron® processors (370-pin PGA)</p> <ul style="list-style-type: none"> TRC-20 + TGI-SAH TRC-20 + TAP-TU (run control only) TRC-6 + TGI-SA TRC-6 + TAP-TU (run control only) ECM-20 + TAP-TU ECM-S2 + TAP-TU <p>Intel Celeron® processors (478-pin pkg, 1.7 GHz+)</p> <ul style="list-style-type: none"> TRC-20 + TAP-PSC ECM-20 + TAP-PSC
<p style="text-align: center;">TAPs/TGIs by Emulator</p> <p>TRC-20</p> <ul style="list-style-type: none"> TGI-S1H - Intel Pentium II/III processors (Slot 1, 66/100/133 MHz FSB speed) TGI-TU - Intel Pentium III processors (1.13A to 1.20+ GHz on 0.13 micron process, 370-pin PGA) TGI-SAH - Intel Pentium III and Celeron processors (370-pin PGA) TGI-MT - Intel Mobile Pentium III Processor-M processors (uFCPGA) TGI-MMH - Intel Mobile Pentium II/III processors (190-pin Mprobe, 66/100 MHz FSB speed) TAP-PSC - Intel® Pentium® 4 (478-pin uFCPGA, run control only) and Celeron (478-pin pkg, 1.7 GHz+, run control only) TAP-WT - Intel® Pentium® 4 (423-pin PGA, run control only) TAP-TU - Intel Pentium III (including the 1.13A to 1.20+ GHz on 0.13 micron process) and Celeron™ processors (370-pin PGA, run control only) 	<p>TRC-6</p> <ul style="list-style-type: none"> TGI-S1A - Intel Pentium II/III processors (Slot 1, 66/100 MHz FSB speed) TGI-S2 - Intel Pentium II/III Xeon™ processors (Slot 2) TAP-TU - Intel Pentium III and Celeron processors (370-pin PGA, run control only) TGI-SA - Intel Pentium III and Celeron processors (370-pin PGA) TGI-MM - Intel Mobile Pentium II/III processors (190-pin Mprobe, 66/100 MHz FSB speed) <p>ECM-S2</p> <ul style="list-style-type: none"> TAP-S1 - Intel PentiumII/III processors (Slot 1) TAP-S2 - Intel Pentium II/III Xeon processors (Slot 2) TAP-TU - Intel Pentium III (including the 1.13A to 1.20+ GHz on 0.13 micron process) and Celeron processors (370-pin PGA) TAP-MT - Intel Mobile Pentium III Processor-M processors (uFCPGA) 	<p>ECM-20</p> <ul style="list-style-type: none"> TAP-WT - Intel Pentium 4 processors (423-pin PGA) TAP-PSC - Intel Pentium 4 processors (478-pin uFCPGA) and Celeron (478-pin pkg, 1.7 GHz+, run control only) TAP-S1 - Intel Pentium II/III processors (Slot 1) TAP-S2 - Intel Pentium II/III Xeon processors (Slot 2) TAP-TU - Intel Pentium III (including the 1.13A to 1.20+ GHz on 0.13 micron process) and Celeron processors (370-pin PGA) TAP-MT - Intel Mobile Pentium III Processor-M processors (uFCPGA)

